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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,256	03/01/2002	Kishan Khemani	11527.354	4244

22913 7590 07/24/2006

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EXAMINER
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WOODWARD, ANA LUCRECIA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/087,256

Applicant(s)

KHEMANI ET AL.

Examiner

Ana L. Woodward

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on May 3, 2006
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-28 is/are pending in the application.
- 4a) Of the above claim(s) 6, 13, 27 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 7-12 and 14-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 6, 13, 27 and 28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 24, 2004.

### *Claim Rejections - 35 USC § 112*

2. Claims 1, 5, 7-12 and 14-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed requirement that the composition be “*substantially free* of thermoplastic starch made using high boiling liquid plasticizers” lacks express antecedent basis and, as such constitutes new matter.

3. Claim 1, 5, 7-12 and 14-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claimed “substantially free” is indefinite as to scope and meaning.

In claim 26, line 4, “aliphatic diol” is broader in scope than the recited 1,4-butanediol per base claim 1

### *Claim Rejections - 35 USC § 102/103*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 23-25 are rejected under 35 U.S.C. 102(a and/or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 6,348,524 (Bastioli et al).

Bastioli et al disclose biodegradable compositions comprising a natural starch, reading on the presently claimed stiff polymer, Ecoflex, reading on the presently claimed aliphatic-aromatic copolyester, and additional components, i.e., glycerine, water and erucamide (example 5).

The claims, as presently recited, do not preclude the presence of patentees' plasticizer. This is because said plasticizer is not used to prepare the starch component. It is noted that applicants' claims are open to the inclusion of optional components, inclusive of plasticizers (page 32 of specification).

### ***Claim Rejections - 35 USC § 103***

7. Claims 1, 5, 7-12, 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,096,809 (Lorcks et al) further in view of U.S. 5,817,721 (Warzelhan et al) as per reasons of record.

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Lorcks et al disclose films derived from biologically degradable compositions comprising

1) thermoplastic starch,

2) at least one polymer selected from the group consisting of aromatic polyesters, polyester copolymers having both aliphatic and aromatic blocks, polyesteramides, polyethylene oxide polymers, polyglycols and polyester urethanes and

3) at least one aliphatic polyester or copolyester. The thermoplastic starch is included in an amount in a range from about 10% to about 95% by weight of the composition (with emphasis).

Examples 6 and 23 differ in essence from the rejected claims in the use of high amounts of thermoplastic starch. Given the inexactitude of the presently claimed “substantially free”, it is maintained that compositions according to the reference having lower amounts of thermoplastic starch, e.g., **about 10%**, would not distinguish over those presently claimed.

Claims 20-24 (now drawn to elected invention) are incorporated into this rejection and rendered obvious by the Lorcks et al’s disclosure of adding fillers. The addition of from 0-80% by weight of fillers, particulate or fibrous organic and inorganic, to analogous biodegradable polymer compositions, is well known in the art as evidenced by Warzelhan et al.

8. Claims 1, 5, 7-12 and 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,883,199 (McCarthy et al) in view of U.S. 5,817,721 (Warzelhan et al) as per reasons of record.

As to applicants’ aliphatic-aromatic copolyester species per claims 1 and 20, given that polybutylene adipate is a preferred aliphatic polyester component, it would have been obvious to one having ordinary skill in the art to have used a copolyester of said polybutylene adipate

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(aliphatic polyester) and polyethylene terephthalate (aromatic polyester), as per the disclosure at column 6, lines 5-12 with the reasonable expectation of success. Accordingly, absent evidence of unusual or unexpected results for the use of said particular copolyester, no patentability can be seen.

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1, 5, 7-12 and 14-26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of copending Application No. 11/103,999. Although the conflicting claims are not identical, they are not patentably distinct from each other because they contain overlapping subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Response to Arguments***

11. Applicant's arguments filed May 03, 2006 have been fully considered but they are not persuasive.

The claimed language "substantially free of thermoplastic starch made using high boiling liquid plasticizers" does not serve to distinguish over Lorcks et al. Said language, when given its broadest reasonable interpretation, reads on compositions as per Lorcks et al comprising about 10% thermoplastic starch.

As to the rejection based on McCarthy et al, it is noted the aliphatic polyester component, as exemplified by the BIONOLLE materials (column 5, lines 23-33, etc.), is governed by glass transitions less than 0 C. In this regard, attention is directed to applicants' own specification disclosure at page 29. Accordingly, since McCarthy et al disclose the aliphatic-aromatic copolyester as a suitable substitute for said wholly aliphatic polyester (see e.g., claim 8), it would follow that said copolyesters would possess similar glass transition temperatures.

As to applicants' preferred aliphatic-aromatic copolyester per claims 1 and 20, given that polybutylene adipate is a preferred aliphatic polyester component, it would have been obvious to one having ordinary skill in the art to have used a copolyester of said polybutylene adipate (aliphatic polyester) and polyethylene terephthalate (aromatic polyester), as per the disclosure at column 6, lines 5-12 with the reasonable expectation of success.

As to claim 25, applicants' arguments are not understood given that said claim recites polylactic acid as the stiff polymer.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

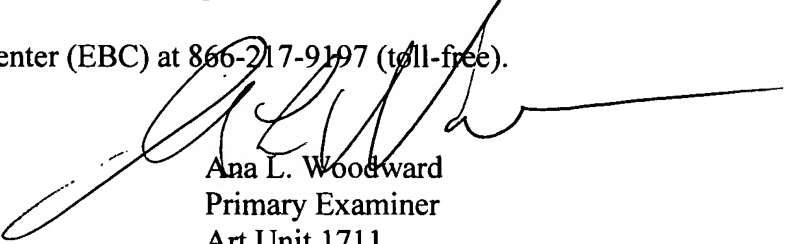
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ana L. Woodward  
Primary Examiner  
Art Unit 1711